CLAIMS

1. A valve (40) comprising a choke means defining at least one passageway (92) and control means (54,56) for adjusting the size of the at least one passageway to adjustably choke a flow of fluid through the valve wherein the choke means includes spring means (64) with parts between which the at least one passageway is situated whereby deformation of the spring means (64) by the control means alter the size of the at least one passageway for adjusting the flow of fluid through the valve, characterized in that the spring means comprises a plurality of discrete spring elements (66) arranged to bear directly or indirectly on each other.

2. The valve as claimed in claim 1, wherein the spring means (64) is configured such that the at least one passageway (92) includes confronting parts which act to direct parts of the fluid flow against each other to dissipate flow energy.

3. The valve as claimed in claim 1 or 2, wherein the spring means (64) is substantially cylindrical and the flow of fluid passes between a region (58) outside and a region (60) inside the spring means as it passes through the valve (40).

4. The valve as claimed in claim 1, 2 or 3, wherein the spring means (64) has different stiffnesses at different points along its length such that choking of the fluid flow through the at least one passageway occurs at different rates along its length as the control means (54,56) is adjusted.

5. The valve as claimed in any preceding claim, wherein at least some of the spring elements (66) each include plural apertures (90) through which the fluid flows.

6. The valve as claimed in claim 5, wherein at least some of the apertures (90) of adjacent spring elements (66) substantially confront each other.

7. The valve as claimed in any preceding claim, wherein the spring elements comprise spring washers (66).

8. The valve as claimed in claim 7, wherein the spring means (64) includes annular locating rings (78) interposed between adjacent spring washers (66).

9. The valve as claimed in claim 8, wherein the adjacent locating rings (78) include complementary confronting surfaces (80) which define one of said at least one passageway.

10. The valve as claimed in claim 9, wherein the spring washers (66) are disposed in an axial array with a central longitudinal axis (62) and the confronting surfaces (80) of the locating rings (78) are disposed at an oblique angle to the longitudinal axis.

11. The valve as claimed in claim 10, wherein the oblique angle is between 20° and 70°.

12. The valve as claimed in claim 5 and claim 10 or 11, wherein the spring washers which are at opposite ends of the axial array do not contain said apertures.

13. The valve as claimed in any one of claims 9 to 12, wherein radially inner or outer peripheries of the spring washers (66) have a first set of locating rings (78) interposed therebetween including said complementary confronting surfaces (80).

14. The valve as claimed in claim 13, wherein the other of the radially inner or outer peripheries of the spring washers (66) have a second set of locating rings (104) interposed therebetween including said complementary confronting surfaces.

15. The valve as claimed in claim 13, wherein the other of the radially inner or outer peripheries of the spring washers have locating rings (73) therebetween which merely act to hold the spring washers in position relative to each other.

16. The valve as claimed in any preceding claim, wherein full compression of the spring means (64) by the control means (54,56) acts to at least substantially close the at least one passageway (92) to thereby at least substantially prevent flow through the valve (40).